

1998 MAINE WASTE MANAGEMENT AND RECYCLING PLAN SUMMARY: Part I --Municipal Solid Waste

Introduction

The 1998 Waste Management and Recycling Plan will serve as an important source of information and policy guidance for solid waste issues in Maine. The development of this document is part of an ongoing planning process for managing Maine's solid waste; an updated plan is submitted to the legislature every five years.

The Plan will be presented in two parts. Part I focuses exclusively on Municipal Solid Waste (MSW); Part II will address all sections which provide information on special waste. The combined Part I and II documents will serve as the Waste Management and Recycling Plan. Part II will be made available in the Spring of 1998 and will include broader recommendations about state solid waste planning and policy.

Waste Management and Recycling Plan Statutes

The State Planning Office is required by statute to prepare the plan, in consultation with the Dept. of Environmental Protection (DEP), every five years. According to 38MRSA 2122, the objective of the plan is to: "prepare an analysis of, and plan for, the management, reduction, and recycling of solid waste for the state. It should be based on the priorities and recycling goals established in sections 2101 and 2132 [statewide 50% recycling rate]. The plan must provide guidance and direction to municipalities in planning and implementing waste management and recycling programs at the state, regional and local levels."

Statistical highlights include the following:

- The ban on new commercial landfills (in effect since 1987) and the closing of municipal landfills has left 8 municipal MSW landfills and 2 commercial landfills.
- In 1995, an estimated 90% of Maine households had access to recycling programs, up from 72% in 1992.
- 41% of the municipal solid waste (MSW) stream was recycled in 1995. This is a significant improvement over the 33% rate for 1993 and moves the state considerably closer to its 1998 goal of 50% statewide MSW recycling. Maine now ranks among the top 10% of states ranked by percent of municipal solid waste recycled.
- In 1995, nearly 40% of the MSW generated was incinerated in one of Maine's four waste-to-energy incinerators. This level has remained stable over the past few years. **Figure 1** provides a four year comparison of Maine's overall solid waste management practices.

Major Solid Waste Issues

Costs of Solid Waste Management for Municipalities: Solid waste handling and disposal costs have risen significantly in recent years, often making this municipal budget responsibility among the top five items on municipal expense sheets.

Markets: Markets have become more important in MSW management programs as recycling and composting programs draw more and more materials out of the waste stream. The plan explores the need for viable markets for all of Maine's reusable waste products.

Construction and Demolition Debris (CDD) disposal: Management of construction, demolition and bulky wastes appears to be a growing problem. By improving the management of construction/demolition and bulky wastes, costs can be controlled and the volume of material requiring landfilling can be reduced, further extending the life of landfills.

Beneficial Use: Currently, DEP is working to establish rules and procedures for beneficial use. The outcome of this process is likely to have a major impact on the extent to which certain waste streams will be diverted from landfills. Beneficial use is the substitution of a waste product for a raw material in a manufacturing process, such as a construction material or as a fuel.

Statewide Recycling Rate

In 1995, the statewide recycling rate reached 41%; this puts Maine in the top 10% of states nationwide. The next measurement (to be done in 1998 for the year 1997) will include, in addition to the municipal recycling program rates, a measurement of the commercial sector's recycling efforts. This calculation will assist in determining the true progress of the state in reaching its goal of recycling 50% of its municipal solid waste. A process for evaluating the State's progress to date will be undertaken by SPO in 1998.

Increasing Recycling

If the state is to reach the goal of recycling 50% of the MSW stream, a variety of approaches and management techniques will need to be implemented. These include the following:

Traditional recycling at the municipal level will require continued attention and technical assistance from the state in order to improve the quantity and quality of materials collected.

Composting must manage a greater portion of the organics stream at the household, municipal and commercial level.

Construction and demolition debris: cost-effective management alternatives to landfilling must be explored and fostered.

Disposal Capacity

Existing and Potential Disposal Capacity

Landfill capacity: A recent survey of the 8 MSW landfills indicated that Maine has MSW landfill capacity (including CDD disposed of at MSW landfills) sufficient until 2012. For municipal landfills which handle only CDD, capacity is sufficient until 2008 to 2010.

Incineration capacity: Currently, incinerators can attract sufficient waste to meet their waste needs for \$40 to \$60/ton. On a state level, the demand and supply of waste has leveled off, resulting in stable tipping fees to communities for the moment. In 1995, the four waste-to-energy plants were operating at approximately 98% process capacity.

Projected Demand for Disposal Capacity

Several factors are likely to provide reliable indications of projected demand for landfill disposal capacity. These factors include:

Changes in waste generation: Based on projected economic and past waste generation data, it is expected that MSW generation will increase at a rate of about 2%-3% per year.

Changes in recycling: The 8% increase (33% to 41%) in recycling from 1991 to 1995 translates to an additional 200,000 tons per year of recyclables over 1991, effectively reducing demand for landfill capacity.

Current and projected use of disposal facilities: Although waste generation is expected to increase annually (as noted earlier), demand for MSW landfill space is likely to remain the same, barring any changes in the waste management infrastructure.

**MUNICIPAL SOLID WASTE
Generation & Management 1988-1995**

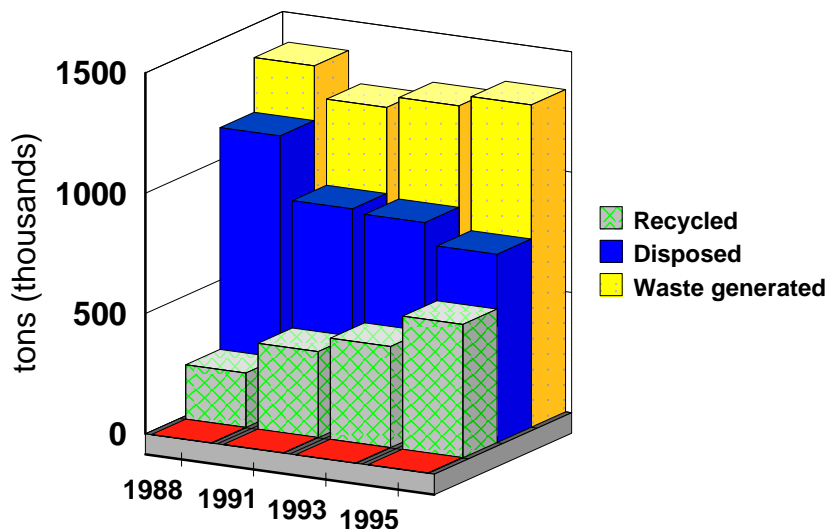


Figure 1

State Planning Office Work Plan Priorities for 1998

State Planning Office's (SPO) future work plans will be closely tied to the solid waste issues and recommended state actions outlined in the plan. In its 1998 work plan, SPO has identified certain priority areas as noted below. These priorities will also serve as criteria for the municipal grant process administered by SPO. In addition, SPO will continue to encourage *regional* management approaches where feasible.

Goal 1: Municipal recycling programs should receive continued attention and technical assistance from the state in order to improve the quantity and quality of materials collected.

Strategy: Serve as a clearinghouse on recycling markets; in conjunction with other state agencies, identify potential markets and assist in their development where appropriate.

Goal 2: Composting must manage a greater portion of the organics stream at the household, municipal and commercial level.

Strategy: Work with municipalities to manage leaf and yard waste as a separate waste stream by developing projects which promote back yard and municipal composting programs.

Goal 3. Construction and demolition debris: cost-effective management alternatives to landfilling should be explored and fostered.

Strategy: Encourage municipalities to 1) properly sort and store wood waste and 2) have it processed for energy producing facilities which operate with air emission controls.

- As a part SPO's on-going solid waste planning and management responsibilities, it will also work on the following projects:

Municipal recycling reports -- measure state and town progress towards recycling goals by continuing to collect and report recycling and disposal information gathered from municipalities and regions.

Statewide recycling rate goal -- develop and implement a process for evaluating the state's progress towards reaching the 50% goal, as well as the resources and conditions required to reach this goal.

Backyard burn -- work with the DEP's Air Bureau, legislature, and municipalities to address the environmental and health concerns that back yard burn poses.